

THAT WHICH IS CLAIMED:

1. A method of making a coaxial cable, comprising the steps of:
advancing a center conductor along a predetermined path of travel;
applying a dielectric layer around the center conductor;
5 applying an outer conductor around the dielectric layer; and
applying a corrosion-inhibiting composition to said outer conductor, said
corrosion-inhibiting compound comprising a corrosion-inhibiting compound dispersed in
an oil, and a stabilizer selected from the group consisting of propylene based glycol
ethers, propylene based glycol ether acetates, ethylene based glycol ethers and ethylene
10 based glycol ether acetates.

2. The method according to Claim 1, further comprising the step of heating
said cable to evaporate the oil and the stabilizer in the corrosion-inhibiting composition.

15 3. The method according to Claim 1, wherein said heating step comprises
applying a polymer melt at an elevated temperature around the outer conductor to heat
said cable.

4. The method according to Claim 1, wherein the stabilizer is selected from
20 the group consisting of dipropylene glycol methyl ether acetate, propylene glycol methyl
ether, dipropylene glycol methyl ether, tripropylene glycol methyl ether, propylene glycol
t-butyl ether, propylene glycol methyl ether acetate, ethylene glycol methyl ether,
ethylene glycol ethyl ether, ethylene glycol butyl ether, diethylene glycol methyl ether,
diethylene glycol ethyl ether, diethylene glycol butyl ether, ethylene glycol ethyl ether
25 acetate, ethylene glycol butyl ether acetate, diethylene glycol ethyl ether acetate,
diethylene glycol butyl ether acetate, and mixtures thereof.

5. The method according to Claim 1, wherein the stabilizer is a dipropylene
glycol ether acetate.

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6. The method according to Claim 1, wherein the stabilizer is dipropylene glycol methyl ether acetate.

7. The method according to Claim 1, wherein the corrosion-inhibiting
5 compound is selected from the group consisting of petroleum sulfonates, benzotriazoles, alkylbenzotriazoles, benzimidazoles, guanadino benzimidazoles, phenyl benzimidazoles, tolyltriazoles, metcaptotriazoles, mercaptobenzotriazoles, and salts thereof.

8. The method according to Claim 1, wherein the corrosion-inhibiting
10 compound is a petroleum sulfonate salt.

9. The method according to Claim 8, wherein the petroleum sulfonate salt is selected from the group consisting of calcium, barium, magnesium, sodium, potassium and ammonium salts, and mixtures thereof.

10. The method according to Claim 9, wherein the petroleum sulfonate salt comprises a calcium salt.

11. The method according to Claim 10, wherein the petroleum sulfonate salt
20 has an activity of greater than 0 to about 25% based on the calcium salt.

12. The method according to Claim 10, wherein the petroleum sulfonate salt further comprises a salt selected from the group consisting of barium and sodium salts.

13. The method according to Claim 1, wherein the oil is a paraffinic oil.

14. The method according to Claim 13, wherein the paraffinic oil has a molecular weight of less than about 600.

15. The method according to Claim 13, wherein the paraffinic oil is a mineral
30 oil.

16. The method according to Claim 1, wherein the corrosion-inhibiting compound is present in an amount of from about 5 to about 40% by weight, the oil is present in an amount of from about 50 to about 90% by weight, and the stabilizer is present in an amount of from about 1 to about 10% by weight.

17. The method according to Claim 1, wherein the corrosion-inhibiting compound is present in an amount of from about 15 to about 30% by weight, the oil is present in an amount of from about 60 to about 80% by weight, and the stabilizer is present in an amount of from about 3 to about 8% by weight.

18. The method according to Claim 1, wherein the corrosion-inhibiting composition has a viscosity of from about 50 to about 450 SSU at 100°F.

19. The method according to Claim 1, wherein said step of applying a corrosion-inhibiting composition to the outer conductor comprises wiping the outer surface of the outer conductor with the corrosion-inhibiting composition.

20. The method according to Claim 1, wherein said step of applying a corrosion-inhibiting composition to the outer conductor comprises immersing the cable in the corrosion-inhibiting composition.

21. The method according to Claim 1, wherein said step of applying an outer conductor comprises applying an outer conductor formed of aluminum or an aluminum alloy.

22. The method according to Claim 1, wherein said step of applying an outer conductor includes the step of directing an aluminum-polymer-aluminum laminate tape around the dielectric layer and overlapping longitudinal edges of the laminate tape to form the outer conductor.

23. The method according to Claim 22, wherein said step of applying an outer conductor further includes the step of forming wires into a braid around the laminate tape after said directing step.

5 24. The method according to Claim 23, wherein said step of applying a corrosion-inhibiting composition to the outer conductor includes the step of applying the corrosion-inhibiting composition to the wires prior to said forming step.

10 25. The method according to Claim 24, wherein said step of applying the corrosion-inhibiting composition to the wires comprises wiping the wires with the corrosion-inhibiting composition.

15 26. The method according to Claim 24, wherein said step of applying a corrosion-inhibiting composition to the outer conductor further comprises wiping the outer surface of the laminate tape with the corrosion-inhibiting composition prior to said forming step.

20 27. The method according to Claim 24, wherein said step of applying a corrosion-inhibiting composition to the outer conductor comprises wiping the cable with the corrosion-inhibiting composition after said forming step.

25 28. The method according to Claim 23, wherein said step of applying a corrosion-inhibiting composition to the outer conductor comprises immersing the cable in the corrosion-inhibiting composition after said forming step.

29. The method according to Claim 22, wherein said step of applying an outer conductor further includes the step of arranging a plurality of wires helically around the laminate tape after said directing step.

30. The method according to Claim 29, wherein said step of applying a corrosion-inhibiting composition to the outer conductor includes the step of applying the corrosion-inhibiting composition to the wires prior to said arranging step.

5 31. The method according to Claim 30, wherein said step of applying the corrosion-inhibiting composition to the wires comprises wiping the wires with the corrosion-inhibiting composition.

10 32. The method according to Claim 30, wherein said step of applying a corrosion-inhibiting composition to the outer conductor further comprises wiping the outer surface of the laminate tape with the corrosion-inhibiting composition prior to said arranging step.

15 33. The method according to Claim 29, wherein said step of applying a corrosion-inhibiting composition to the outer conductor comprises wiping the cable with the corrosion-inhibiting composition after said arranging step.

20 34. The method according to Claim 29, wherein said step of applying a corrosion-inhibiting composition to the outer conductor comprises immersing the cable in the corrosion-inhibiting composition after said arranging step.

25 35. The method according to Claim 1, wherein said step of applying an outer conductor comprises directing an aluminum strip around the dielectric layer and longitudinally-welding abutting edges of the metal strip to form the outer conductor, and said step of applying a corrosion-inhibiting composition to the outer conductor comprises wiping the outer surface of the outer conductor with the corrosion-inhibiting composition.

36. The method according to Claim 1, wherein said step of applying an outer conductor comprises directing an aluminum strip around the dielectric layer and longitudinally-welding abutting edges of the metal strip to form the outer conductor, and said step of applying a corrosion-inhibiting composition to the outer conductor comprises
5 immersing the cable in the corrosion-inhibiting composition.